Research Paper

Dormitory Services Quality Evaluation using Servqual and IPA (Case Study: Ardakan University)

Mitra Moubed[1] ⓘD, Ali Nadizadeh[2] ⓘD, Parisa Shaker[1] ⓘD

1. Department of Industrial Engineering, Faculty of Engineering, Ardakan University, Ardakan, Iran.
2. Industrial engineering department, Faculty of engineering, Ardakan university, Ardakan University, Ardakan, Iran.

Abstract

The education system can fulfill its tasks when, in addition to quantity, it is also in good condition in terms of quality. On the other hand, due to national and global competition between universities and the fast growth of the number of them, these institutions are forced to increase their quality of services in order to become priority for the students and society. One of the important services of universities for students is their accommodation services in dormitories. Therefore, dormitory is an important part of universities as a second home and will replace the family for a group of students. A high quality and satisfaction of students from these services can help the academic progress, physical and mental health of students. In this paper, the quality of dormitory services of Ardakan University has been evaluated using the SERVQUAL model and analyzed by IPA. To achieve this goal, the data was collected using questionnaire from 145 students in Ardakan University by sequential sampling. Examining students' expectations and perceptions of the services and the gap between them has shown a negative gap in all aspects of service quality; the biggest gap for tangibles and the least one for assurance. Analysis of different aspects and questions in this research using IPA matrix showed the strengths, weaknesses and improvement priorities. The results of this study can be used in the evaluation and diagnosis of dormitory services of other universities, as well as Iran Tourism hotels.

Extended abstract

Introduction

Higher education is responsible for the social, cultural, economic and educational growth and development of the society and it should be of good quality in addition to quantity (Yasbolagi et al, 2015). On the other hand, competitions in the field of higher education have increased the pressure on universities and educational institutions to improve their capabilities and service quality. The customer and his satisfaction are key elements in different definitions of quality that contribute to the success and excellence of organizations and increase their profitability (Madanian & Shekarchizade, 2019). In universities, students are one of the important groups of customers whose satisfaction can be a determining factor for evaluating the institution's performance (Yazdani & Hajian, 2018). Evaluating the quality of university services from the perspective of students, as one of the basic requirements of modern management, can help in planning for the long-term success and survival of universities. Some of the university services for students include information technology services, library, welfare services, administrative services, education and dormitory services (Haji Mohammad & Khoshghalb, 2020).

The service quality model (SERQUAL) is one of the most widely used models for evaluating service quality, which was first introduced by Parasuraman et al. in 1985. This model defines service quality in five: tangibles, reliability, accountability, assurance and empathy.

In the studies with the Seroqual tool, the evaluation of the gap between the expectations and perceptions of customers has been used for quality analysis. Another method that is suggested for the analysis of different dimensions of quality is the use of the importance-performance matrix (IPA), which makes suggestions and priorities based on the importance of each issue. For example, this method was used in Stig University of Portugal to evaluate the quality of educational services, and suggestions for improvement were defined (Silva & Fernandes, 2011). In a university in Indonesia, the student satisfaction index and the IPA matrix have been used to evaluate the quality of laboratory services in key performance indicators. The satisfaction index of students in this study is 72%. The IPA analysis has shown priorities for improving these services in matters such as equipment adequacy, their calibration, laboratory safety and staff behavior (Sidik et al, 2019).

Considering the importance of university dormitory services and the gap observed in research on the subject, in this article a model for evaluating the quality of dormitory services with the help of serqual techniques and importance-performance analysis is presented. The purpose of this research was to evaluate the quality of dormitory services in the university, which Ardakan University was selected as a case study. In this regard, the main question of the research is the quality of university dormitory services, which will be investigated based on the SERVQUAL model.

Theoretical Framework

In higher education, various studies have investigated the quality of educational services in different universities, which have often shown a negative gap in most dimensions of these services. Among the most recent of these studies, we can cite the evaluation of the satisfaction of university pharmacy students in Saudi Arabia (Sibai et al, 2021), students of dental and nursing colleges in Saudi Arabia and Egypt (Rabaa & Hala, 2022) and postgraduate students of medical sciences in Kermanshah (Toghroli et al, 2021).). But in the university, in addition to educational services, other services are also provided. In a research to investigate students' satisfaction with the academic role of Babolsar city, it was shown that accommodation services and welfare services had the greatest effect, and sports services and employment facilities had the least effect on student satisfaction (Shamai & Mahmoodi, 2011). In our

Mitra Moubed, Ali Nadizadeh, Parisa Shaker: Dormitory Services Quality Evaluation using Servqual and IPA (Case Study: Ardakan University)

68

country, in the girls' dormitories of the Urmia University of Medical Sciences, researchers showed that the dormitory services are acceptable and satisfactory from the students' point of view, using SERQUAL questionnaires. However, a significant difference has been observed between the average satisfactions of students in different dormitories (Nabilou & Khani, 2015). In another qualitative research that was conducted among girls living in the dormitories of ten Iranian Universities, students were dissatisfied with the facilities of the rooms, the condition of the buildings, cultural and welfare facilities (Serajzadeh & Habibpour, 2019). In the dormitories of Mohaghegh Ardabili University, architectural and construction factors have been investigated and problems have been identified (Daliri & Hatami, (2022). In another study, the relationship between drug use and the quality of sleep and life in the dormitories of Allameh Tabatabai University was investigated (Kushkestani, 2020).

Another method used in studies to analyze different dimensions of quality is the use of the importance-performance matrix, which makes suggestions and priorities based on the importance of each issue. For example, this method was used in Stig University in Portugal to evaluate the quality of educational services (Silva & Fernandes, 2011); in a university in Indonesia to evaluate the quality of laboratory services (Sidik et al, 2019); in a university in China to evaluate the quality of English language teaching services (Wenyu, 2021); and in another university in Beijing to evaluate the quality of classroom teaching (Wang et al, 2022)).

Research methodology

The purpose of this applicable research, which was carried out with a survey-analytical method, is to evaluate the condition of the dormitories of Ardakan University. The statistical population of the present study is 1000 students living in the university dormitories, including 400 boys and 600 girls in four separate buildings. Cochran's formula was used to determine the sample size, and the number 88 was acquired at the 10% confidence level. To carry out this study, the standard questionnaire of Serqual model was adapted for dormitory services. This initial questionnaire was reviewed in several stages with the help of experts and university dormitory service officials, and the final questionnaire was prepared with 31 items in 5 dimensions.

In order to ensure the validity of the questionnaires, the opinions of at least 5 experts and relevant officials were used and the corrections were made according to their opinion. In order to measure reliability, a preliminary study was conducted with a random sample of 13 students, and Cronbach's alpha was 0.774 for expectations and 0.848 for perceptions. Since the coefficients are higher than 0.7, the questionnaire has the necessary reliability.

Research Findings

First, hypotheses were proposed based on the research questions, and then SPSS 19 software was used for inferential statistical analysis. The results of the statistical tests showed that students' expectations of different aspects of dormitory services are higher than average and their perception of these dimensions is lower than average. Students were most satisfied with the quality of services in terms of guarantee, accountability, empathy, confidence and tangibles respectively. Also, in all dimensions of service quality, a significant gap was observed between expectations and perceptions. The students' satisfaction with the dormitory services was different among different dormitories, and based on the average, the best services were provided in the Derakhshan, Farhang, and Payam Noor dormitories, respectively. The variables of age, year of entering the university and duration of residence did not affect the satisfaction of students.

In gap analysis models, researchers believe that the lower the service quality, the higher the receivers' expectations. In other words, the presence of defects and gaps in one dimension has an aggravating effect and causes quality loss in other dimensions (Yazdani & Hajian, 2018). Therefore, prioritizing improvement measures and allocating funds to dimensions with the largest negative gaps can be effective in reducing other negative gaps as well.

The biggest negative gap of this research was in the tangible dimension; despite the university's investment in building and equipping new dormitories, this dimension still failed to attract students' satisfaction, and it is also recognized as a weakness in the IPA matrix. Also, this matrix has correctly classified the allocation of funds for "updating the dormitory infrastructure" in the resource waste group. The priority of other problems identified in this dimension is mentioned in the previous paragraph. The second negative gap in the confidence dimension indicates the failure to fulfill the promises made to the students. But since this dimension is located in the fourth area of the IPA matrix, it has little priority for improvement. The review of the items also showed that only the item "quickly fixing the created problems" as a weakness has a higher priority for improvement. Based on these results, there is currently no priority for improvement in the other three dimensions.

Conclusion

The results of this research, like (Putri & Anffraini, 2018) and (Serajzadeh & Habibpour, 2019), show a significant gap between the expectations and perceptions of students about the quality of dormitory services. In other articles that have evaluated the quality of hostel services, the quality gap has not been measured. Compared to the work of Putri & Anffraini (2018), this research has also identified the priority of improvement in each of the dimensions with the help of IPA matrix. Naturally, the improvement priorities in the two universities are different from each other; but in both cases, improvement of tangibles and physical facilities has been among priorities. Similarly, in the study of the opinions of female students living in the dormitories of ten Iranian Universities, the physical epuipments and facilities of the rooms were also among the dissatisfaction cases (Serajzadeh & Habibpour, 2019). Also, the results of this research, like the work of Nabilou & Khani (2015) conducted in Urmia University, show a significant difference between the qualities of different dormitories of a university.

Conducting a similar study periodically can show the effectiveness of the various measures taken. Future researchers can use other methods to prioritize improvement measures in dormitories. Another suggestion is to examine ways to save money and reduce the costs of dormitories in order to fund the cost measures for improvement in the dormitories. Considering the service gap related to the behavior and attitudes of employees, it is suggested that future researchers identify and prioritize the educational needs of dormitory employees.

Mitra Moubed, Ali Nadizadeh, Parisa Shaker: Dormitory Services Quality Evaluation using Servqual and IPA (Case Study: Ardakan University)

70